

REMARKS

Claims 1-29 are now pending in the application. Minor amendments have been made to the specification to overcome the objections to the specification. Claims 1, 2, 19 and 29 have been amended. Bases for the amendments can be found throughout the application, claims ands drawings as originally filed and as such, no new matter has been presented. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

INFORMATION DISCLOSURE STATEMENT

The Examiner has stated that the Information Disclosure Statement filed April 12, 2004 fails to comply with 37 C.F.R. §1.98(a)(2). Applicant respectfully submits that the aforementioned Information Disclosure Statement was fully compliant with 37 C.F.R. §1.98(a)(2) as the aforementioned Information Disclosure Statement stated that “[a]ny patents, publications or other information which are listed on Form 1449 or on the copies of PTO-892 but which are not enclosed herewith, were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. §120: US Serial Number 09/930,611”. Accordingly, Applicant submits that the Examiner has erred in not considering the several foreign patent documents and other documents cited in the aforementioned Information Disclosure Statement and respectfully requests that the Examiner fully consider each of these references.

SPECIFICATION

The Examiner has objected to the title of the invention and to the first line of the specification. More specifically, the Examiner has stated that the title of the present application was not descriptive and that the first line of the specification should be amended to state that the identified patent application is now abandoned.

Applicant has amended the title of the present application so that it closely parallels the preamble of the claims and has amended the first line of the specification to indicate that the identified patent application is now abandoned. Accordingly, Applicant submits that the objection to the title and specification have been rendered moot.

REJECTION UNDER 35 U.S.C. § 112

Claims 1-29 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point and distinctly claim the subject matter which Applicant regards as the invention. More specifically, the Examiner has stated that “[t]he invention is directed to a method for fabricating an input pinion, however, all of the independent claims include the limitation ‘meshing the pinion with a ring gear’ in the last line of each independent claim.” Applicant has amended the preamble of each independent claim and as such, Applicant submits that the rejection under 35 U.S.C. §112, second paragraph, has been rendered moot.

Claims 8 and 22 have been rejected under 35 U.S.C. §112, first paragraph as failing to comply with the written description requirement. This rejection is respectively traversed.

Applicant respectfully submits that support for Claims 8 and 22 in the originally filed application and as such, Applicant submits that the Office has not presented a *prima facie* case of non-compliance with the written description requirement. In this regard, paragraph [0040] of the originally filed application states "it may be desirable in some situations to employ one or more finish grind operations after the stem 150 and the gear 152 have been assembled to finish the first and second bearing surfaces 164 and 166 and the gear teeth 190". Paragraph [0040] of the originally filed application further states that "operations such as grinding, honing or lapping may be employed after the stem 150 and the gear 152 have been assembled". Applicant notes that the teeth of the ring and pinion gears for automotive differentials are routinely lapped.

Applicant notes that "[a]dequate description under the first paragraph of 35 U.S.C. 112 does not require *literal* support for the claimed invention ... Rather, it is sufficient if the originally-filed disclosure would have conveyed to one having ordinary skill in the art that [the Applicant] had possession of the concept of what is claimed."

In view of the above remarks, Applicant submits that the Examiner has not presented a *prima facie* case of lack of written description as one of ordinary skill in the art would find that the claim limitations are reasonably described or conveyed in the originally filed application. Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of Claims 8 and 22 under 35 U.S.C. §112, first paragraph.

REJECTION UNDER 35 U.S.C. § 103

Claim 1 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Parker (USPN 580673) in view of Kilop (USPN 6250123). Claims 2, 3, 9-18 and 29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Parker in view of Sabroff et al. (USPN 4856167). Claim 4 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Parker and Sabroff et al. and further in view of Banas et al. (USPN 4000392). Claims 5-7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Parker and Sabroff et al. and further in view of Lindsey et al. (USPN 5070745) and Chmura (USPN 4394421). Claim 8 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Parker and Sabroff et al. and further in view of McInerney et al. (USPN 6041640). Claims 19-28 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Parker, Kilop and Sabroff et al. These rejections are respectively traversed.

Applicant submits the Examiner has not presented a *prima facie* case of obviousness in that there is no motivation for the various combinations of references and the various combinations of references do not teach or suggest each claim element.

Concerning independent Claim 1, Applicant notes that neither Parker or Kilop teach or suggest a tubular shaft having a pair of axially spaced apart bearing surfaces. Applicant also submits that Parker does not teach or suggest forging a pinion such that each tooth formed in the forging step is larger than a desired tooth size by an amount that is less than or equal to about 0.04 inch. Applicant notes that one of ordinary skill in the art would understand the pertinent claim limitation to mean that the forged pinion

includes forged teeth that are near net shaped. Applicant notes that Parker discloses near net forming of an annular gear wheel blank, but states that the gear wheel blank does not include gear teeth. Concerning the Examiner's statement that "official notice is taken that it was well known to provide the claimed tooth size in order to provide a secure mesh", it is apparent that the rejection under Section 103 is based on the Examiner's personal knowledge. As the Examiner knows, the Examiner's ability to use personal knowledge is qualified by 37 C.F.R. §1.107, which states:

When a rejection in an application is based on facts within the personal knowledge of an employee of the Office, the data shall be as specific as possible, and the reference must be supported, when called for by the applicant, by the affidavit of such employee, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant or other persons.

Accordingly, Applicant respectfully requests that the Examiner **provide an affidavit** supporting the Examiner's position that it was well known in the art to near-net forge the teeth of a pinion gear for an automotive differential to a size that is larger than a desired tooth size by an amount that is less than or equal to about 0.04 inch.

Applicant notes, too, that Parker is directed to a method for manufacturing side gears adapted for use in vehicle differentials (col. 1, lines 7-10) and that Kilop is directed to a method of forming a power transmission member. Neither Parker or Kilop teach or suggest the meshing of a pinion gear with a ring gear. Moreover, Kilop does not teach or suggest the roll forming of splines onto a tubular shaft and Parker teaches that the forging or net forming of a gear hub blank and thereafter the forming the external splines (17) via conventional face hobbing. Applicant submits that it isn't readily apparent that roll forming of the splines onto the gear hub blank of Parker would be desirable. For example, if the gear hub blank were forged, the blank would likely be hardened due to the work hardening of the material during the forging process.

Consequently, it would appear that some form of annealing would be required prior to processing the gear hub blank through a roll forming operation to form the splines.

Appellant notes that the Patent Law draws a distinction between trade-offs and motivation to combine: trade-offs often concern what is feasible, not what is necessarily desirable, whereas motivation to combine requires the latter. See, e.g., *Winner International Royalty Corp. v. Wang*, 2002 F.3d 1340, 53 USPQ2d 1580 (Fed. Cir.), cert. denied, 530 U.S. 1238 (2000). In the instant case, the modification suggested by the Examiner does not appear to be desirable and as such, it is a trade-off. Accordingly, it appears that the motivation for the modification is impermissibly found in Appellant's disclosure.

Applicant reminds the Examiner that the Federal Circuit has stated that

[v]irtually all inventions are necessarily combinations of old elements. The notion, therefore, that combination claims can be declared invalid merely upon finding similar elements in separate prior art patents would necessarily destroy virtually all patents and cannot be the law under the statute, Section 103.

Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 1575, 1 USPQ2d 1593, 1603 (Fed. Cir. 1987). Accordingly, “[t]he test under §103 is not whether an improvement or a use set forth in a patent would have been obvious or nonobvious. The test is whether the claimed invention, considered as a whole, would have been obvious or nonobvious. ... Failure to consider the claimed invention as a whole is an error of law.” *Jones v. Hardy*, 727 F.2d 1524, 1530, 220 USPQ 1021, 1025 (Fed. Cir. 1984). It appears, however, that the Examiner has impermissibly picked and chosen amongst various prior art references to re-create the claimed invention.

In view of the above remarks, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of Claim 1 under 35 U.S.C. §103(a).

Concerning independent Claim 2 and independent Claim 29, Applicant notes that Parker is directed to a method of manufacturing side gears for a vehicle differential, while Sabroff et al. is directed to near net ring gear forgings for heavy duty trucks. As the Examiner knows, the side gears of a differential are not meshed with a ring gear and as such, there appears to be no suggestion in the art or the references themselves for the combination. Moreover, Parker does not teach or suggest a shaft having a pair of axially spaced apart bearing surfaces. Accordingly, Applicant submits that the Examiner has not presented a *prima facie* case of obviousness and respectfully requests reconsideration and withdrawal of the rejection of Claims 2 and 29 under 35 U.S.C. §103(a).

Applicant notes that Claims 3-18 depend from Claim 2 and should be in condition for allowance for the reasons set forth for Claim 2, above.

Regarding the choice of materials, Applicant submits that one of ordinary skill in the art would not “have used the claimed materials in order to provide the desired strength characteristics” as stated by the Examiner.

With specific regard to Claims 5-7 and the combination of Parker, Sabroff et al., Lindsey et al. and Chmura, Applicant submits that there is no teaching or suggestion for the cited combination. The Examiner has stated that “it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Parker/Sabroff et al. with roll forming threads on the shaft, in light of the teachings of Lindsey et al. and Chmura, in order to fasten the pinion shaft to a differential drive in order to form symmetrically shaped threads by roll forming.”

As noted above, Parker is directed to a method for manufacturing side gears for a vehicle differential and Sabroff et al. is directed to a method for forming a ring gear for a heavy-duty truck. Applicant submits that there is no reason to provide threads on the gear wheel hub of Parker (the side gear of Parker is not threadably engaged to anything) and that Chmura does not teach or suggest roll forming of threads onto a tubular shaft. Accordingly, Applicant submits that the Examiner has impermissibly picked and chosen "among individual parts of prior art references as a 'mosaic to recreate a facsimile of the claimed invention'". *Akzo N.V. v. U.S. Int'l Trade Comm'n*, 808 F.2d 1471, 1481, 1 USPQ2d 1241, 1246 (Fed. Cir. 1986)(quoting *W.L. Gore & Assoc., Inc. v. Garlock*, 721 F.2d 1540, 1552, 220 USPQ 303, 312 (Fed. Cir. 1983)).

In view of the above discussion, Applicant submits that the Office has not set forth a *prima facie* case of obviousness. Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of Claims 1-29 under 35 U.S.C. §103(a).

Concerning Claims 19-28, Applicant refers the Examiner to the above-discussion concerning Parker, Kilop and Sabroff et al. Applicant submits that there is no motivation for the combination of these references and that the cited combination does not teach or suggest each claim limitation of Claims 19-28.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests

that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

By: 
Michael D. Zalobsky
Reg. No. 45,512

Dated: August 24, 2006

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600

MDZ